

### DETAILED ACTION

Applicant's amendment in the reply filed on 10/14/2011 is acknowledged. Claims 1-11, 18, and 20 have been cancelled. Claims 12-17, 19, and 21-33 are pending. Claims 22-31 are withdrawn. **Claims 12-17, 19, 21, 32 and 33 are examined on the merits.**

Any rejection that is not reiterated is hereby withdrawn.

### Claim Rejections –35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13, 19, 32 and 33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Charrouf et al (Triterpenes and sterols isolated from the pulp of *Argania spinosa* (L.), Sapotaceae, *Plantes Medicinales et Phytotherapie* 25 (203), 112-117, 1991) (see full translation attached), in view of Laigneau et al (FR 2692783 A1).

This rejection is maintained for reasons of record set forth in the Office Action mailed out on 7/14/2011, repeated below, slightly altered to take into consideration Applicant's amendment filed on 10/14/2011. Applicants' arguments filed have been fully considered but they are not deemed to be persuasive.

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Charrouf et al teach tripterpenic alcohols and sterols were isolated from the unsaponifiable fraction of the pulp's (thus claims 12 and 13 are met) lipidic extract (thus a vegetable oil) (thus a lipophilic extract) of *Argania spinosa*, and these compounds are lupeol (thus claim 19 is met), beta and alpha-amyrines, etc. (see page 1, Abstract). Charrouf et al also teach that Argan tree (the same as *Argania spinosa*) produces a fruit called "Argan", which is formed of a fleshy part or pulp and a very hard core containing an oleaginous seed. Charrouf et al teach the argan oil extracted using traditional methods is used for culinary purposes and in traditional medicine for disease of the skin, against chickenpox and acne, and against aging of the skin. Charrouf et al teach the pulp is ground, the lipids are extracted with hexane (thus claim 33 is met) in the soxhlet apparatus. The unsaponifiable fraction of the hexane extract is isolated according to the method described in [3] (page 2, 4<sup>th</sup> paragraph).

Charrouf et al do not teach a method of treating skin damaged by UVA comprising the lipophilic extract from the pulp of *Argania spinosa* fruit, and at least one dermopharmaceutical auxiliary and/or additive.

Laigneau et al teach a composition contains the unsaponifiable fraction of sesame oil (thus oily bodies, thus at least one dermopharmaceutical auxiliary and/or additive, thus claim 32 (b) is met) mixed with one or more unsaponifiable fractions from any oil, especially a vegetable oil, containing vitamin E, especially soya oil and particularly wheat germ oil. Preferably the composition contains the unsaponifiable fraction for wheat germ oil and the unsaponifiable fraction of sesame oil, both as concentrates obtained by molecular distillation of the oils at 190-260 (200-220) degree C and 0.1-1.5 Pa (0.13-0.5 Pa). The amount of unsaponifiable fraction in each concentrate is 15-25% (10-20%), and the amount of each concentrate in the composition is

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10-90% (50%). A cosmetic contains the composition in a physiologically acceptable carrier, and may be a cream, emulsion, ointment, lipstick, a solar product or restructuring, nutritive, anti-wrinkle or day cream. A composition for oral use may be a capsule or tablet. Laigneau et al teach the composition is used for application to the skin, or as a nutritional supplement (claimed). Pharmaceuticals are used to prevent or treat the effects of UV-A on the skin (see Abstract, full translation is attached).

It would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to combine unsaponifiable fraction of sesame oil from Laigneau et al and the tripterpenic alcohols and sterols isolated from the unsaponifiable fraction of the pulp's lipidic extract from Charrouf et al to treat the effects of UV-A on the skin since Laigneau et al teach a composition for treating the effects of UV-A on the skin containing the unsaponifiable fraction of sesame oil (thus oily bodies, thus at least one dermopharmaceutical auxiliary and/or additive, thus claim 32 (b) is met) mixed with one or more unsaponifiable fractions from any oil, especially a vegetable oil. Therefore, one of the ordinary skills in the art would have been motivated to add an unsaponifiable fraction of a vegetable oil, the lipidic extract of *Argania spinosa* from Charrouf et al, into the composition of Laigneau et al to achieve the UVA treating effect.

It would also have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to treat UV-A and/or UV-B damaged skin since Charrouf et al teach the argan oil is used against aging of the skin. It is well known in the art that aging of the skin is largely due to photo-aging which is caused by UV-A or UV-B radiation; and the lipophilic extract from

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the pulp of *Argania spinosa* fruit is “argan oil” in a broad sense, therefore, it would also have been *prima facie* obvious for one of ordinary skill in the art to use a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to against aging of the skin caused by UV-A and/or UV-B radiation.

From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Claims 12-17, 19, 21, 32 and 33 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Charrouf et al and Laigneau et al as applied to claims 12, 13, 19, 32 and 33 above, and further in view of Charrouf et al 2 (EP 1213025 A1).

This rejection is maintained for reasons of record set forth in the Office Action mailed out on 7/14/2011, repeated below, slightly altered to take into consideration Applicant's amendment filed on 10/14/2011. Applicants' arguments filed have been fully considered but they are not deemed to be persuasive.

The teachings of Charrouf et al and Laigneau et al are set forth above and applied as before.

The combination of Charrouf et al and Laigneau et al does not specifically teach the claimed percentages of extracts or auxiliaries and additives in claims 14-17, and 21.

Charrouf et al 2 teach cosmetic or dermatological preparations for skin and/or hair care, containing *Argania spinosa* leaf extract, having e.g. sunscreen, anti-inflammatory, antimicrobial,

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antioxidant and antiaging effects (see Title). Charrouf et al 2 teach other objects of the invention relate to the use of extracts from the leaves of the plant *Argania spinosa* as sunscreen, especially against UVA radiation and/or UVB radiation [0022]. Charrouf et al 2 teach the total quantity of plant extract, which is included in the inventive preparations, is usually 0.01 to 25 wt.% (thus claims 14 and 21 are met), preferably 0.03-5 wt.% (thus claim 15 is met), particularly 0.03-0.6 weight% (thus claim 16 is met) calculated as dry weight [0014]. Charrouf et al 2 teach the total amount of auxiliaries and additives may be 1 to 50 (thus claim 17 is met), preferably 5 to 40%, based on the cosmetic and/or dermopharmaceutical preparations [0015].

It would also have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to try to use the concentrations of *Argania spinosa* leaf extract in the sunscreen product against UVA radiation and/or UVB radiation from Charrouf et al 2 since when applying fruit pulp extract of the same plant, *Argania spinosa*, in the same product, sunscreen product against UVA radiation, the concentrations of different plant parts (one from leaf, one from fruit pulp) of the same plant material are expected to have comparable biological effects. Therefore, it would have been obvious for one of the ordinary skills in the art to adopt the concentrations of *Argania spinosa* leaf extract in the sunscreen product against UVA radiation and/or UVB radiation from Charrouf et al 2 for the fruit pulp extract of *Argania spinosa* in treating UVA radiation. Furthermore, the result-effective adjustment in conventional working parameters (e.g., determining an appropriate amount of the extract within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

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From the teachings of the references, it is apparent that one of the ordinary skills in the art would have had a reasonable expectation of success in producing the claimed invention.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Applicant argues that “Independent claim 32 has been amended to clarify that a UV-A and UV-B treating effect is provided by the lipophilic extract from the pulp of *Argania spinosa* fruit. Neither Charrouf et al nor Laigneau et al. recognize that the extract of the fruit of this particular plant has such properties. Laigneau et al. disclose that for treating effects of UV-A, both the sesame oil concentrate and the wheat germ oil concentrate are needed, as either concentrate alone is ineffective: “The inventors also found that, of equally unexpected way, the above composition mentioned consists of the combination of the two concentrates, is active not only as a preventive or immediate against the effect of UVA, but also in the curative effects of UV-A rays while vitamin E and the two mentioned above concentrates only have almost no or no action against these effects.” *Page 4 of the translation*” (page 6, last paragraph bridging). Applicant also argues that “It is clear from the disclosure of Laigneau et al that the unsaponifiable fraction of sesame oil when mixed with the unsaponifiable fraction of another vegetable oil such as wheat germ oil provides the activity necessary to treat UV-A damage of the skin. Contrary to the assertion of the Office Action, one skilled in the art would not have considered it obvious to use a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to treat UV-A and/or UV-B damaged skin in the composition of Laigneau et al, because the compositions of the reference already provide such

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treatment. *See Ex parte Rinkevich*, Appeal No. 12007-1317, for US Pat. Appl. No. 09/731,623, no US Pat. No. 7,356,704 (BPAI 2007) ("In the instant case, we conclude that a person of ordinary skill in the art *having common sense* at the time of the invention would not have reasonably looked to Wu to solve a problem already solved by Savill. Therefore, we agree with Appellants that the Examiner has impermissibly used the instant claims as a guide or roadmap in formulating the rejection.")" (page 7, 2<sup>nd</sup> paragraph). Applicant further argues that "Further, the claim limitation of "a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to treat UV-A and/or UV-B damaged skin" is not taught or suggested by the combination of Charrouf et al and Laigneau et al. *See In re Royka, supra*. Neither reference recognizes such properties in the claimed extracts. The necessary reason to combine the references in the way proposed by the Office Action is therefore absent from the rejection" (page 7, 3<sup>rd</sup> paragraph).

This is not found persuasive. It would also have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to treat UV-A and/or UV-B damaged skin since Charrouf et al teach the argan oil is used against aging of the skin (page 2, first paragraph of the full translation). It is well known in the art that aging of the skin is largely due to photo-aging which is caused by UV-A or UV-B radiation; and the lipophilic extract from the pulp of *Argania spinosa* fruit is "argan oil" in a broad sense, therefore, it would also have been *prima facie* obvious for one of ordinary skill in the art to use a lipophilic extract from the pulp of *Argania spinosa* fruit in an amount effective to against aging of the skin caused by UV-A and/or UV-B radiation.

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Applicant's arguments have been fully considered but they are not persuasive, and therefore the rejections in the record are maintained.

### **Conclusion**

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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/Qiuwen Mi/

Primary Examiner, Art Unit 1655